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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,297	04/02/2004	Gregory H. Bearman	52316/JWP/C766	1886
23363 7590 10/09/2007 CHRISTIE, PARKER & HALE, LLP PO BOX 7068 PASADENA, CA 91109-7068			EXAMINER WOOD, AMANDA P	
			ART UNIT 1657	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/817,297	Applicant(s) BEARMAN ET AL.	
	Examiner Amanda P. Wood	Art Unit 1657	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-25 and 29 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 15, 18-25 and 29 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Invention II (claims 14-25 and 29) in the reply filed on 9 May 2007) is acknowledged.

Claims 14-25 and 29 are presented for consideration on the merits.

Claim Objections

Claims 14-25 and 29 are objected to because of the following informalities: The cited claims are drawn to a "system" which is not one of the statutory classes of invention. Since the claims appear to include all limitations to apparatus, the claims will be examined as though they are drawn to "apparatus." Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-15, 18-25 and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Recktenwald et al (US 4,745,285).

A system is claimed for monitoring cellular activity in a cellular specimen that contains a plurality of excitable markers, comprising a laser microscope, a tunable filter, a plurality of detectors, and an analyzer.

Recktenwald et al beneficially teach an apparatus comprising a fluorescence microscope with a laser light source which generates a beam of light of a singular wavelength, further comprising filters which can filter out extraneous wavelengths (see, for example, col. 3, lines 15-45, and col. 6, lines 25-65). Recktenwald et al further teaches that excitation energy is thus provided in the apparatus by the laser light beam, and fluorescence, if emitted by the cells energized by the illumination from the light source, is typically collected at a 90-degree angle relative to the excitation axis of the incident light beam from the laser. Recktenwald et al teach that to collect the fluorescence at different wavelengths emitted by the cells, the fluorescence signals are separated or split, by a dichroic mirror or beam splitter, and the fluorescence is the collected in different photodetectors, depending on which color region the fluorescence belongs in (see, for example, col. 5, lines 20-45). Recktenwald et al beneficially teach that various filters may be used in conjunction with the photodetectors to obtain the purest signal possible, and further, that many different fluorescent signals may be simultaneously collected at different wavelengths (see, for example, col. 5, lines 50-65). Recktenwald et al beneficially teach that the various photodetectors may be well-known photomultiplier tubes or similar devices which convert light signals into electrical impulses so that the light thereby detected may be associated with the cells flowing through the apparatus. In addition, Recktenwald et al beneficially teach that the

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apparatus should comprise display, storage and processing electronics (i.e., an analyzer comprising a memory operative and a processor operative) to which the electrical signals from the photodetectors should be fed so that one or more characteristics of the cells under analysis may be determined (see, for example, col. 6, lines 25-45).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the methods disclosed by Recktenwald et al based upon the teachings available to one of ordinary skill in the art at the time the claimed invention was made. Furthermore, Recktenwald et al particularly point out that the present apparatus would be useful in determining the characteristics of cells using multiple fluorescence analysis, and therefore, it would have been both obvious and beneficial for the skilled artisan to modify use the apparatus taught by Recktenwald et al so as to provide the best possible cell imaging apparatus, using known techniques of filtering light, such as acousto-optical tunable filters, and liquid crystal tunable filters, or using a plurality of photomultiplier tubes, or the high-gain variety. Furthermore, it would have been obvious, based upon the teachings of Recktenwald et al, to use different laser microscopes and different methods for focusing light onto the collector (see, for example col. 5, lines 30-60), and therefore, it would also have been obvious to one of skill in the art to use an integrating sphere as a collector. The result-effective adjustment of particular conventional working conditions (e.g., using different types of filters, detectors, microscopes, or collectors) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Claims 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda P. Wood whose telephone number is (571) 272-8141. The examiner can normally be reached on M-F 8:30AM -5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on (571) 272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



APW
Examiner
Art Unit 1657

RALPH GITOMER
PRIMARY EXAMINER
GROUP 1200

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